

### **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims**

1-10. (cancelled)

11. (previously presented) A catheter comprising: a first catheter tube having at least two superposed layers of materials, including an inner layer and an outer layer, secured together with a polymeric mediator layer adhered to both the inner layer and the outer layer, and with mechanical properties differing from one another, a lumen in the first catheter tube, and a balloon sealingly surrounding the first catheter tube, whereby the inner layer comprises high-density polyethylene and forms the lumen, and the outer layer comprises a polymer and forms an outer surface of the first catheter tube, wherein the first catheter tube includes a distal end and the outer layer extends to the distal end of the first catheter tube.

12. (previously presented) A catheter as in claim 11, wherein the mediator layer comprises low-density polyethylene.

13. (previously presented) A catheter as in claim 11, wherein the outer layer comprises polyamide.

14. (previously presented) A catheter as in claim 11, further comprising: a second catheter tube disposed about the first catheter tube.

15. (previously presented) A catheter as in claim 14, wherein a proximal end of the balloon is connected to a distal end of the second tube, and a distal end of the balloon is connected to the distal end of the first catheter tube.

16. (previously presented) A catheter comprising: a catheter tube having at least two superposed layers of materials, including an inner layer and an outer layer, secured together and with mechanical properties differing from one another, a guidewire lumen in the catheter tube for the sliding fit of a guidewire, and a balloon with a distal end sealingly surrounding the outer layer of the catheter tube, wherein the inner layer comprises high-density polyethylene and forms the guidewire lumen, and the outer layer comprises a polyamide and forms an outer surface of the catheter tube, and wherein the catheter tube further comprises a mediator layer providing adhesive anchorage between the inner layer and the outer layer.

17. (previously presented) A catheter as in claim 16, wherein the mediator layer comprises low-density polyethylene.

18. (previously presented) A catheter comprising:

- (a) a tube comprising:
  - (i) an outermost layer comprising a polymer having a first coefficient of friction;
  - (ii) an innermost layer coextensive with the outermost layer and forming a lumen, the innermost layer comprising a high-density polyethylene having a second coefficient of friction which is less than the first coefficient of friction; and
  - (iii) a middle layer disposed between the outermost layer and the innermost layer and affixing the outermost layer to the innermost layer; and
- (b) a balloon sealed to the tube.

19. (previously presented) The catheter of claim 18, wherein the middle layer comprises low-density polyethylene.

20. (previously presented) A catheter comprising:

- (a) a first tube comprising:
  - (i) an outermost layer comprising a polymer having a first coefficient of friction;
  - (ii) an innermost layer coextensive with the outermost layer and forming a

lumen, the innermost layer comprising a high-density polyethylene having a second coefficient of friction which is less than the first coefficient of friction; and

(iii) a middle layer disposed between the outermost layer and the innermost layer and affixing the outermost layer to the innermost layer;

(b) a second tube disposed about a portion of the first tube; and

(c) a balloon with a distal end sealingly surrounding the outermost layer of the first tube and a proximal end sealingly surrounding the second tube.

21. (previously presented) The catheter of claim 20, wherein the middle layer comprises low-density polyethylene.